

Work Order ID 162643

Monday, June 05, 2017 11:50:59 AM

162643

Page 1

Item ID: D412-702-073

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Comfort Crew Shoulder Harness

Start Date: 6/9/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 6/15/2017 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: PA

Date: 20170605

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
IIN-D412-702-3	B

DAS
6
9-89

JUN 06 2017

100

Document Control

0.00

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D412-702-073 CHG001

6 DAS
27
9-89

JUL 04 2017

105

Pick Kit

0.00

105

Packaging

Memo

0.00

Packaging

6 JUN 09 2017

DAS
6
9-89

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

6 DAS
28
9-89

JUL 04 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 162643

Monday, June 05, 2017 11:50:59 AM

162643

Page 2

Item ID: D412-702-073 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Comfort Crew Shoulder Harness
Start Date: 6/9/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 6/15/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00				6	DAS 27 9-89		JUL 04 2017
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: _____ Packaging Memo Identify and pack for shipping as per PPP D412-702-073 Location: <u>fs 029</u>	0.00 0.00				6	DAS 28 9-89		JUL 03 2017
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00					DAS 21 9-89		JUL 04 2017

DAS
21
9-89
JUL 04 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Monday, June 05, 2017 11:50:58 AM

Page 1

Work Order ID: 162643

162643

Parent Item: D412-702-073

D412-702-073

Parent Item Name: Comfort Crew Shoulder Harness

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A 13.04.05 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3-10A *AN3-10A* Bolt		Purchased	No			110	Each	207.0000	2	12			
									**				
											DAS 6 9-89	JUN 09 2017	DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				GA				59					
				m136787				59					
				over003				100					
				m137321				0					
				m137544				100					
				ST349				48					
				m137321				48		12			
AN3-4A *AN3-4A* Bolt		Purchased	No			110	Each	361.0000	4	24			
									**				
											DAS 6 9-89	JUN 09 2017	DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST350				361					
				m137478				361		24			
AN4-6A *AN4-6A* BOLT		Purchased	No			110	Each	755.0000	2	12			
									**				
											DAS 6 9-89	JUN 09 2017	DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				over003				600					
				M137464				600					
				ST345				155					
				M137178				3					
				M137320				152		12			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Page 2

Work Order ID: 162643

162643

Parent Item: D412-702-073

D412-702-073

Parent Item Name: Comfort Crew Shoulder Harness

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 6.00

Required Qty: 6.00

D4305-043

Manufactured No

110

Each

2.0000

1

6

D4305-043

Shoulder Harness Assembly

DAS
27
9-89

Location

ST462

114129

Loc Qty

2

2

Loc Code

**

DAS
6
9-89

~~JUN 09 2017~~

DAS
28
9-89

1111 04 2017

MS21042L3

Purchased

No

110

Each

2,013.000

6

36

MS21042L3

Nut

DAS
27
9-89

Location

FP001

m135945

GA

m134360

M136665

OVER007

m134360

m137680

ST303

m137321

m137495

Loc Qty

79

79

434

102

332

1000

0

1000

500

4

496

Loc Code

**

DAS
6
9-89

JUN 09 2017

DAS
28
9-89

162643

36

Monday, June 05, 2017 11:50:58 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Monday, June 05, 2017 11:50:58 AM

Page 3

Work Order ID: 162643

162643

Parent Item: D412-702-073

D412-702-073

Parent Item Name: Comfort Crew Shoulder Harness

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 6.00

Required Qty: 6.00

MS21042L4

Purchased

No

110

Each

3,041.000

2

12

MS21042L4

Nut

**

DAS
6
9-89

JUN 09 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

10

m133363

10

GA

51

m135058

51

OVER007

2400

m137402

400

m137544

1000

m137680

1000

ST303

580

m137371

580

12

NAS1149D0332J

Purchased

No

110

Each

791.0000

10

60

NAS1149D0332J

Washer

**

DAS
6
9-89

JUN 09 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP

225

m136015

8

m137075

217

GA

308

m136643

308

ST264

258

m136015

0

m137412

258

60

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Monday, June 05, 2017 11:50:58 AM

Page 4

Work Order ID: 162643

162643

Parent Item: D412-702-073

D412-702-073

Parent Item Name: Comfort Crew Shoulder Harness

Start Date: 6/9/2017

Required Date: 6/15/2017

Start Qty: 6.00

Required Qty: 6.00

NAS1149D0363J

Purchased

No

110

Each

1,295.000

6

36

NAS1149D0363.J

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

91

m134055

13

m137164

78

ST263

1204

m137587

1204

**

DAS
6
9-89

JUN 09 2017

DAS
28
9-89

NAS1149D0432J

Purchased

No

110

Each

1,180.000

4

24

NAS1149D0432.J

WASHER

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

24

m131026

24

ST260a

1000

m137459

1000

ST264

156

m134676

156

**

DAS
6
9-89

JUN 09 2017

DAS
28
9-89

NAS1149D0463J

Purchased

No

110

Each

4,888.000

4

24

NAS1149D0463.J

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

40

M135056

40

ST260a

4000

M137371

2000

M137699

2000

ST263

848

M137544

848

**

DAS
6
9-89

JUN 09 2017

DAS
28
9-89

Monday, June 05, 2017 11:50:58 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Work Order ID 162643

Monday, June 05, 2017 11:50:59 AM

162643

Page 1

Item ID: D412-702-073

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Comfort Crew Shoulder Harness

Start Date: 6/9/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 6/15/2017 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

JUN 06 2017

IIN-D412-702-3

B

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D412-702-073 CHG001

CB

©

JUN 12 2017

105

Pick Kit

0.00

105

Packaging

Memo

0.00

Packaging

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging



Transport
Canada

Transports
Canada

Department of Transport

Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: SH04-7

Issue No.: 3

Approval Date: February 06, 2004

Issue Date: March 09, 2006

Responsible Office:

Ontario

Aircraft/Engine Type or Model:

BELL 205A-1, 205B, 212, 214B, 214B-1, 412, 412 CF, 412 EP

Canadian Type Certificate or Equivalent:

BELL 205B H-104

BELL 214B, 214B-1 H-80

BELL 212, 412, 412 CF, 412 EP H-86

BELL 205A-1 H1SW

Description of Type Design Change:

Shoulder Harness Kits

Installation/Operating Data,

Required Equipment and Limitations:

Manufacture of the Shoulder Harness Kits must be in accordance with Dart Aerospace Ltd. MDL-D412-702, Revision B, approved Jan 17 2006, or later approved revisions.

Installation of the Shoulder Harness Kits must be in accordance with Dart Aerospace Ltd. IIN-D412-702, Revision C, approved Mar 07 2006, or later approved revision.

Maintenance of the Shoulder Harness Kits must be in accordance with Dart Aerospace Ltd. ICA-D412-702, Revision 2, Transport Canada accepted Mar 09 2006, or later Transport Canada accepted revisions.

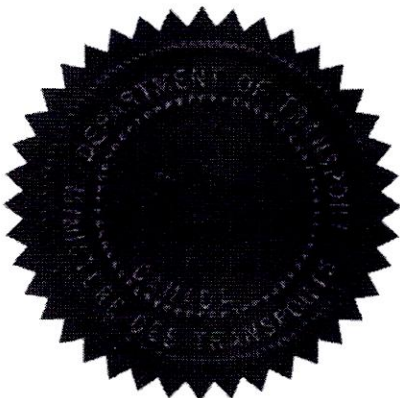
Operation with the Shoulder Harness Kits must be in accordance with Dart Aerospace Ltd. FMS-D412-702, Revision C, Transport Canada approved Mar 09 2006, or later Transport Canada approved revisions.

Basis of Certification:

The basis of certification for this modification was FAR 29, up to and including Amendment 29-47, except for 29.561, 29.562, and 29.785 at Amendment 29-11.

- End -

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated will not adversely affect the airworthiness of the modified product.




M. G. Mariotti
For Minister of Transport

Canada

REFERENCE ONLY

4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-702-071 <i>Pilot/Co-pilot Shoulder Harness Kit</i>	-2.6 lb -1.2 kg	± 22.0 in ± 0.56 m	± 57.2 in lb ± 0.67 m kg	47.0 in 1.19 m	-122.2 in lb -1.43 m kg
D412-702-073 <i>Pilot/Co-pilot Shoulder Harness Kit</i>	-2.6 lb -1.2 kg	± 22.0 in ± 0.56 m	± 57.2 in lb ± 0.67 m kg	47.0 in 1.19 m	-122.2 in lb -1.43 m kg
D412-702-075 <i>Pilot/Co-pilot Shoulder Harness Kit</i>	-2.6 lb -1.2 kg	± 22.0 in ± 0.56 m	± 57.2 in lb ± 0.67 m kg	47.0 in 1.19 m	-122.2 in lb -1.43 m kg

5.0 PARTS LISTS

QTY -071	QTY -073	QTY -075	Part Number	Description
X			D412-702-071	Dart Pilot/Co-Pilot Shoulder Harness Kit
	X		D412-702-073	Dart Pilot/Co-Pilot Shoulder Harness Kit
		X	D412-702-075	Dart Pilot/Co-Pilot Shoulder Harness Kit
1			D4305-041	SHOULDER HARNESS
	1		D4305-043	SHOULDER HARNESS
		1	D4305-045	SHOULDER HARNESS
4	4	4	AN3-4A	BOLT
2	2	2	AN4-6A	BOLT
2	2	2	AN3-10A	BOLT
6	6	6	MS21042L3	NUT
2	2	2	MS21042L4	NUT
10	10	10	NAS1149D0332J	WASHER
6	6	6	NAS1149D0363J	WASHER
4	4	4	NAS1149D0432J	WASHER
4	4	4	NAS1149D0463J	WASHER

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Revision: **B**

Date: 17.01.18